RECEIVED

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

JUN 1 - 1998

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

In the Matter of	DOCKET FILE COPY ORIGINA
Federal State Joint Board on) CC Docket No. 96-45
Universal Service)
)
Forward-Looking Mechanism) CC Docket No. 97-160
for High Cost Support for) DA 98-848
Non-Rural LECs)

COMMENTS OF U S WEST COMMUNICATIONS, INC.

In its Public Notice dated May 4, 1998, the Common Carrier Bureau ("Bureau") requested comments concerning the appropriate input values and level of revenue benchmark for a federal forward-looking economic cost mechanism.¹ With this filing, U S WEST Communications, Inc. ("U S WEST") is supplementing the comments of the BCPM Joint Sponsors. U S WEST is specifically addressing three issues within the Public Notice:

- The provision of empirical data for the costs of network materials and construction costs utilized by forward-looking models;
- Depreciation;
- Revenues to be included and level of the benchmark.

I. <u>INPUT VALUES FOR A FORWARD-LOOKING COST PROXY MODEL</u>

While proposed cost proxy models utilize thousands of inputs, the Commission needs to focus on the inputs to which the proxy models' are most

Public Notice, Common Carrier Bureau Requests Further Comment on Selected Issues Regarding the Forward-Looking Economic Cost Mechanism for Universal Service Support, CC Docket Nos. 96-45 and 97-160, DA 98-848, rel. May 4, 1998 ("Public Notice"). Order extending deadline for filing comments, DA 98-990, rel. May 22, 1998.

sensitive. These are the critical inputs. These critical inputs fall into two distinct categories:

- 1. Inputs where actual experience can be used as a guide;
- 2. Inputs where actual observations and experience must be supplemented with information and analysis to maintain consistency with the basic constraints of the forward-looking modeling assumptions.

The first group contains inputs such as line counts, structure costs, plant mix, and operating expenses. For these items there are readily measurable values such as current line counts and contractor prices for installing plant. These types of items should be based on current operating experience. The input values submitted by U S WEST are based on current experience and should be utilized as part of the base of empirical evidence used to create the Commission's inputs. These values are included in Confidential Attachment 1. Attachment 1 includes current U S WEST installed material costs and contractor-based structure costs for the state of Nebraska. While U S WEST's material and structure construction costs vary by state, the Nebraska data are representative of the 14 states in which U S WEST operates. These input values are further supported by specific construction projects from 1996 provided in Confidential Attachment 2. The actual job cost data are from Iowa and Minnesota.

The second group includes input items such as structure sharing, depreciation, and cost of capital, where analysis is required to make informed decisions. For example, one cannot find the conditions and assumptions utilized in a forward-looking model in the real world. These assumptions include a single telephone provider building an entire network of outside plant from existing central

office locations to serve 100% of the market while non-telephone utilities continue to exist as they do today. The determination of the correct inputs for this group of items requires analysis and careful examination of alternatives.

Structure sharing is one of the most critical input values in the cost proxy models. Each individual construction activity is capable of having its own distinct percentage of cost assigned to the telephone service provider. The percentage of activities assigned to the telephone service provider vary by activity with poles being the resource most likely to be shared among utilities. U S WEST finds that, on average, the telephone service provider will share 100 percent of the poles with one other provider. This assigns 50 percent of the pole cost to the telephone service provider within the models. Trenching activities are shared with other providers less frequently, the percentage of trenching costs assigned to the telephone provider should fall between 80 and 100 percent depending on the density zone.

U S WEST bases these values on a combination of its real world experience and the need for consistency with the theoretical construct of a forward-looking model where all telephone plant is placed instantaneously and serves 100 percent of the current service demand. This theoretical construct provides that only telephone plant is replaced. Therefore, the amount of the sharing that can take place under these conditions is limited. U S WEST's suggested default values provide a conservative estimate because more sharing is provided in the model than could likely be achieved under the model's forward-looking assumptions. As a means of comparison, the Joint Board's recommended sharing values constitute the lower bound of the percent of structure cost borne by the telephone provider. This

constitutes the lower bound because under the forward-looking assumptions there are limits on the number of utilities and opportunities to share structure costs. The upper bound on sharing is represented by the recommendation of the Utah Department of Public Service (DPS) in Utah Docket No. PSC 94-999-01 Phase 2. In this docket the Utah DPS recommended that 90 percent of underground structure costs, 95 percent of buried structure costs, and between 33 percent and 25 percent of aerial costs be assigned to the telephone service provider in the proxy models.

U S WEST recommends that the Commission carefully study the impact that input values have within the cost proxy models so that it utilizes realistic values that will provide adequate support levels to maintain universal service throughout the nation.

II. DEPRECIATION

In the <u>Public Notice</u>, the Bureau sought comment on the particular values of depreciation lives and future net salvage values that should be used for determining the forward-looking costs of providing supported services in a competitive environment.

U S WEST believes that the depreciation lives it is proposing in Exhibit A below, reasonably represent the forward-looking cost of providing supported services in a competitive environment. The technological and competitive environment in the telecommunications industry today is changing at a pace unanticipated just a few years ago. Just as U S WEST must keep pace with these changes, so too must the depreciation lives used in cost studies. U S WEST has undertaken a detailed and quantitative approach to determining the depreciation

lives for use in forward-looking cost models. The reasonableness of the resulting lives shown in Exhibit A is demonstrated Attachment 3.

Please see the attached testimony of William R. Easton, and the study prepared by Technology Futures, Inc., "Depreciation Lives for Telecommunications Equipment: Review and Update", for additional discussion and support of the provided depreciation lives (Attachment 3).

EXHIBIT A

A STEEL	por la laboratione de la companione de l	Plant and the second se
Facilitation in the contract of the contract o	nia Zona van Stania stationia va Stania nia politica necesaria non a station a serie.	Mars V has a consistent of Mallacon V of the series of
Land	0	0%
Motor Vehicle	8	11%
Special Purpose Vehicles	10	22%
Garage Work	12	3%
Other Work	14	10%
Building	46	1%
Furniture	16	18%
Office Support	15	9%
General Purpose Computers	5.5	9%
Switching	10	8%
Circuit/DLC	10	3%
Pole	28	-57%
Aerial Copper	15	-26%
Aerial Fiber] 20	-25%
Underground Copper	15	-13%
Underground Fiber	20	-16%
Buried Copper] 20	-7%
Buried Fiber] 20	-9%
Conduit	55	-7%

III. REVENUE BENCHMARK

The Commission should reject a revenue benchmark and adopt cost-based benchmarks or benchmarks based on affordability as proposed in U S WEST's Interstate High Cost Affordability Plan ("IHCAP"). A revenue-based benchmark supports the perpetuation of the implicit support inherent in the revenues for non-universal services. The only revenues appropriate for determining the lower bounds of any benchmark would be the revenues paid by the end user for the use of the basic line, that is the basic rate, and the interstate customer access line charge.

In their <u>Second Report on the Use of Cost Proxy Models</u>,² the state members of the Joint Board on universal service reversed their earlier position in support of a revenue benchmark and recommended instead a cost-based benchmark. The state members reversed their earlier position for several key reasons, including:

- A cost-based benchmark will be relatively stable compared to a revenue benchmark. If competition reduces the average revenue, a revenue benchmark will decline. This could result in an increase in the universal service support by expanding the difference between the proxy cost and the revenue benchmark.
- A national average revenue benchmark would require periodic review and more regulatory oversight than a cost-based benchmark.
- Additional administration will be incurred to gather and process the information necessary to maintain a current representative benchmark.
- The information will become increasingly difficult to obtain as new entrants enter the market and competition increases.
- There is difficulty in determining a revenue benchmark that will match the service revenue and the cost of services included in the cost proxy models.

² State Members' <u>Second Report on the Use of Cost Proxy Models</u>, CC Docket No. 96-45, Kenneth McClure, et al., Apr. 21, 1997 at 14-15.

• A benchmark based on cost is a more straight forward means of establishing a benchmark. It will better identify and focus support to the high cost areas. (Report at 14-15)

The adoption of a cost-based benchmark as recommended by the state members of the Joint Board will avoid the pitfalls of a revenue benchmark outlined above. The cost-based benchmark will be easier to administer and will not perpetuate the implicit subsidies and price distortions inherent in a revenue benchmark.

In another <u>Public Notice</u>, the Commission is seeking comments on proposals to revise the methodology for determining universal service support. US WEST proposes the Commission adopt the IHCAP methodology which would establish two cost-based benchmarks. The higher benchmark or "Supra Benchmark" would target support to very high-cost customers. This benchmark is based on cost. No artificial inflation of the benchmark by adding support inherent in other services could or should be used to establish this benchmark. The IHCAP methodology calls for a second or lower benchmark, the "Primary Benchmark." The federal fund would support 25% of the needed support identified between the Primary and Supra benchmarks and would use this support to offset implicit support in interstate rates. This primary benchmark should be based on cost or measures of affordability and should not be revenue based. The Commission should look at model results, fund sizes based on those results and should make public policy decisions on how

³ <u>Public Notice</u>, <u>Common Carrier Bureau Seeks Comment on Proposals to Revise the Methodology for Determining Universal Service Support</u>, CC Docket Nos. 96-45 and 97-160, DA 98-715, rel. Apr. 15, 1998.

much support should be covered by the federal fund and how much responsibility should be left to the states.

Trying to identify the appropriate revenues to determine a benchmark unnecessarily complicates the calculation of universal service support. The Commission and providers will have to endure extensive, time-consuming and costly data requests to determine revenues to be included in the benchmark. Even after going through the data request, the results will not be perfect. Basic service rates and services areas are defined differently by different providers, packaging of products and services complicates the issue, extra reporting requirements will be required of competitive local exchange providers, and time and resources expended by all providers to comply with the data request will be significant. Additionally, a revenue benchmark creates uncertainty for future fund size because the fund size will move as the revenues included in the benchmark change. The Commission should strive to keep the funding mechanism as simple, straight-forward and predictable as possible. Adoption of the IHCAP plan and cost-based benchmarks

achieve these goals. The Commission should adopt the recommendation of the state member's of the Joint Board to adopt a cost-based benchmark for the reasons stated above and in their report.

Respectfully submitted,

By:

Robert B. McKenna

John L. Traylor

Suite 700

1020 19th Street, N.W. Washington, DC 20036

(303) 672-2798

Its Attorneys

Of Counsel, Dan L. Poole

June 1, 1998

CONFIDENTIAL ATTACHMENT 1 PURSUANT TO 47 C.F.R. SECTION 0.459

CONFIDENTIAL ATTACHMENT 2 PURSUANT TO 47 C.F.R. SECTION 0.459

BEFORE THE PUBLIC SERVICE COMMISSION OF WYOMING

IN THE MATTER OF THE)	
INTERCONNECTION CONTRACT)	
NEGOTIATIONS BETWEEN)	DOCKET NOs.
AT&T COMMUNICATIONS OF THE)	72000-TS-96-95 and
MOUNTAIN STATES, INC. AND U S WEST)	70000-TS-96-319
COMMUNICATIONS, INC. PURSUANT TO)	
47 U.S.C. SECTION 252)	

TESTIMONY OF

WILLIAM R. EASTON

DIRECTOR, CAPITAL RECOVERY

US WEST COMMUNICATIONS

1 **IDENTIFICATION OF WITNESS** 2 PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS 3 Q. 4 ADDRESS. 5 My name is William R. Easton. My title is Director -Α Capital Recovery for U S WEST Communications, Inc. (U S WEST)¹. 6 7 My business address is 1600 7th Ave., Seattle, Washington. 8 9 PLEASE GIVE A BRIEF OUTLINE OF YOUR EDUCATIONAL Q. 10 BACKGROUND AND TELEPHONE COMPANY EXPERIENCE? 11 A I graduated with honors from Stanford University in 1975, earning a 12 Bachelor of Arts degree. In 1980 I received a Masters of Business 13 Administration from the University of Washington. In addition, I am a 14 Certified Management Accountant and member of the Institute of 15 Management Accountants. 16 17 I began working for Pacific Northwest Bell in 1980 and have held a 18 series of jobs in financial management, including staff positions in the 19 Treasury and Network organizations. 20

¹ For the sake of this testimony, all references to U S WEST Communications, Inc. and U S WEST refer to U S WEST Communications, Inc. and have no connection to the U S WEST Media Group or its subsidiaries.

1 In 1986 I began working in the Capital Recovery Organization. Within 2 Capital Recovery, I have held a number of positions, including managing 3 the development of depreciation studies. 4 5 6 **PURPOSE OF TESTIMONY** 7 WHAT IS THE PURPOSE OF YOUR TESTIMONY? 8 Q. 9 Α The purpose of my testimony is to support the depreciation lives used in 10 the cost studies filed by U S WEST. I will describe how U S WEST 11 develops depreciation lives in its depreciation studies and how these 12 lives should be applied in cost studies. I will then demonstrate that 13 these lives are very reasonable when compared with the depreciation 14 lives used by other competitors in the telecommunications industry. In 15 addition, I will identify the existence of a reserve deficiency related to U S 16 WEST's Wyoming plant and discuss the need to address this deficiency 17 as a part of interconnection charges. 18 19 DEPRECIATION LIVES IN COST STUDY METHODOLOGIES 20 21 Q. COULD YOU PLEASE DESCRIBE HOW US WEST DETERMINES 22 **DEPRECIATION LIVES?**

U.S. WEST depreciation lives are based upon detailed depreciation studies which examine historical and future retirement influences for each of the various plant accounts. The lives selected are based primarily on industry studies of new telecommunications technologies and their expected impact on the public telephone network. The industry studies are the work of Technology Futures, Inc., a leading consultant specializing in the dynamics of technology change. TFI's studies are based on industry data, interviews with participants in the industry and mathematical models. A copy of the Technology Futures study

Depreciation Lives for Telecommunications Equipment is attached as Exhibit 1. The results of the industry studies were analyzed, and where necessary, modified by U.S. WEST to fit company experience direction and account profiles.

Q.

A

Α

ARE THE LIVES USED IN THE COST STUDIES THE SAME LIVES THAT U S WEST PROPOSES IN ITS DEPRECIATION STUDIES?

With the exception of the copper cable accounts, the lives proposed in the depreciation studies and those used in the cost studies are the same. For the copper cable accounts, adjustments to the depreciation study lives have been made for cost study purposes. This is due to the fact that the copper accounts are a dying technology. New investment in the copper accounts can be expected to have significantly different life

characteristics than the <u>embedded</u> investment for which the depreciation study proposes lives.

A.

Q. WHAT LIVES SHOULD BE USED IN COST STUDY METHODOLOGIES

FOR THE COPPER CABLE ACCOUNTS?

As noted in <u>Depreciation Lives for Telecommunications Equipment</u>, for accounts that are in the final stages of their life cycle, such as the metallic cable accounts, the expected life of equipment purchased in the late stages of the account, is roughly the same as the average remaining life of the embedded investment.

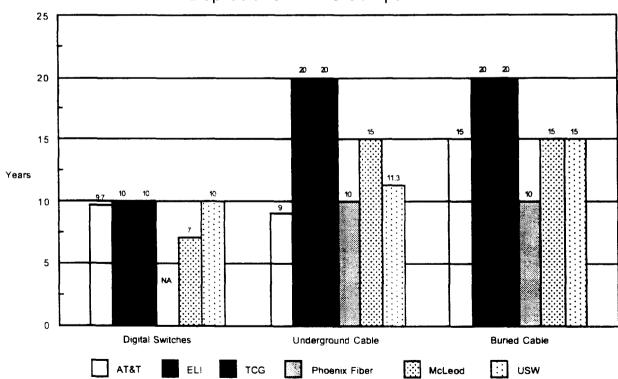
To translate the depreciation study lives into a forward looking cost study scenario, the depreciation study life for Buried Cable was shortened from 20 years to 15 years. Given that Technology Futures estimates that the remaining life of buried cable is 10 years, this is a very conservative assumption. Using historical relationships established in the depreciation studies, it is assumed that the Aerial and Underground copper cable accounts will have lives that are approximately 75% of the life of the buried cable accounts. Therefore, for cost study purposes, the lives for Aerial and Underground copper accounts are assumed to be approximately 11.3 years (.75 X 15).

Q. HOW DO THE DEPRECIATION LIVES USED IN THE COST STUDIES

COMPARE WITH LIVES USED BY OTHERS IN THE INDUSTRY?

Such information is difficult to come by because competitors, who do not have their depreciation rates regulated, do not generally disclose their depreciation lives. There is enough information available, however, to serve as a benchmark against which the U S WEST cost study lives can be compared to determine their reasonableness. The graph below compares the lives used by competitors for various categories of plant with the lives used in the U S WEST cost studies.

Depreciation Lives Comparison



ELI, TCG and Phoenix Fiber Cable Lives Are For Fiber AT&T Underground Cable is Being Amortized.

1

2

3

4

5

6

7

8

9

It should be noted that the lives used for ELI, TCG and Phoenix Fiber in the cable accounts are for fiber cable since they have no copper cable. The lives shown for U S WEST are for copper cable, which as a dying technology, can be expected to have shorter lives than fiber. The U S WEST cost studies use a twenty year life for fiber. Measured against the benchmark of competitors lives for the same types of equipment, the U S WEST cost study lives are very reasonable.

A.

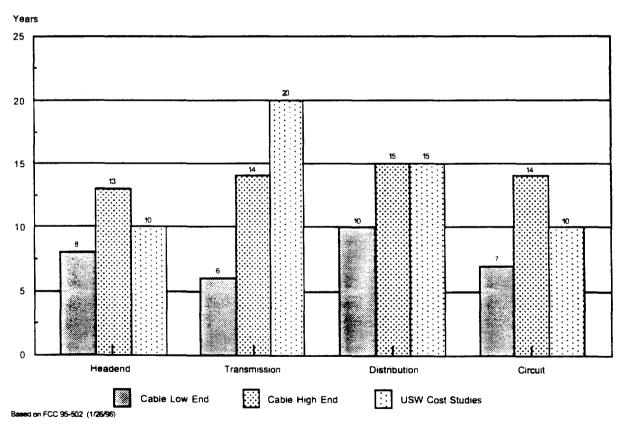
Q. WHAT ABOUT THE LIVES USED BY OTHER COMPETITORS SUCH AS CABLE TELEVISION COMPANIES? DO YOU HAVE ANY INFORMATION ABOUT

THE DEPRECIATION LIVES THEY USE?

I do have some information for the cable companies. In January of this year the FCC issued an order regarding the depreciation lives to be used by cable television companies (FCC 95-502 1/26/96). These lives are based on a composite of lives used by the companies for financial reporting purposes. Given the stated intention of the cable television companies to provide telephony services, these lives serve as another benchmark against which the U S WEST cost study lives can be compared to determine reasonableness. The graph below compares the range of lives established for the cable companies with U S WEST's cost study lives for similar types of equipment. Some translation is

required since the categories used for cable companies are somewhat different than those used by the FCC for telecommunications companies. Cable headend equipment roughly equates to telephone circuit equipment. Cable transmission equates to telephone fiber plant and cable distribution equates to telephone buried copper plant. The cable circuit classification is similar to telecommunications circuit equipment.

CABLE INDUSTRY REGULATORY LIFE RANGES



As depicted in the graph, the U S WEST lives appear very reasonable, if not too long in some cases.

Although projecting depreciation lives is not an exact science, to the degree possible, U S WEST has undertaken a detailed and quantitative approach to determining the depreciation lives for use in its cost studies. The reasonableness of the resulting lives is borne out by a comparison with the lives used by other companies in the industry for the same types of equipment. Based on my analysis, the U S WEST lives are the appropriate basis for determining service costs.

DEPRECIATION RESERVE DEFICIENCY

Α

Q. COULD YOU PLEASE DESCRIBE WHAT A DEPRECIATION RESERVE

DEFICIENCY IS?

A reserve deficiency is the difference between the amount of accumulated depreciation (depreciation reserve) actually recorded on the Company's books and the amount that should have been recorded if the most recently estimated lives had been the basis for depreciation entries all along. For example, let's assume that a company has \$ 100 in assets and expects the assets to last for 10 years. The company would depreciate these assets over the ten year period at 10% per year. At the end of four years there would be \$ 40 in accumulated depreciation (10% X \$100 X 4). Let's further assume that at the end of the fourth year the estimate for the life of the assets is determined to be eight

years. At this point we are half way through the assets' life (4/8) and the assets should be 50% depreciated. However, because a longer life estimate was used in the earlier years, the depreciation reserve is only at the \$40 level, not the \$50 level it should be at given the current life expectation of the assets. The difference between the actual booked reserve of \$40 and the \$50 level it should be at is called a reserve deficiency. Over the years, life estimates for U S WEST's Wyoming plant have been shortened, resulting in the creation of a significant reserve deficiency.

Α

Q. HOW LARGE IS THE COMPANY'S RESERVE DEFICIENCY IN WYOMING?

Exhibit 2 of my testimony is a comparison, by plant account, of the Company's 1/1/97 depreciation reserve with the 1/1/97 "Theoretical Reserve" which is the level the reserve should be at if the depreciation study life estimates had been used throughout the life of the embedded plant. The theoretical reserve calculation is made using the method which is recognized by the FCC and state commissions. The estimated lives used in the calculations are the depreciation lives that U S WEST is using for financial reporting purposes. Based on these lives, the theoretical reserve is \$ 373.5 M while the book reserve is only \$ 321.8 M. After separations, the intrastate reserve deficiency in Wyoming is approximately \$ 37.2 M.

1		
2	Q.	HOW DO TRADITIONAL DEPRECIATION METHODS DEAL WITH
3		RESERVE DEFICIENCIES?
4	Α	The remaining life method of calculating depreciation rates that is
5		authorized in Wyoming addresses the reserve deficiency by increasing
6		current depreciation rates so that the deficiency is fully expensed over
7		the future remaining life of the assets.
8		
9	Q.	IF THE RESERVE DEFICIENCY IS ALREADY BEING ADDRESSED IN
10		TODAY'S DEPRECIATION RATES, WHY IS THERE A CONCERN ABOUT
11		THE DEFICIENCY?
12	A	As I just discussed, the remaining life method spreads the recovery of
13		the deficiency over the remaining life of the assets. The problem with the
14		remaining life method of recovery becomes apparent when looking at
15		the account which has the largest reserve deficiency: buried cable.
16		Under the remaining life method it will be 9 years before the deficiency is
17		fully addressed; 9 years before depreciation that should have been
18		recognized in previous years is finally recognized.
19		
20	O	WHY ARE YOU PROPOSING THAT THE WYOMING RESERVE DEFICIENCY

BE ADDRESSED IN THE INTERCONNECTION CHARGES?

21

The delayed recovery of the deficiency becomes particularly problematic in a competitive environment. Unless recovery of the deficiency is addressed in some manner in interconnection charges, customers can avoid compensating U S WEST for past depreciation expenses by simply choosing to have their service provided by another carrier. This, in turn, will increase the burden for the remaining U S WEST customers and ultimately preclude U S WEST from recovering the reserve deficiency through customer rates. Other U S WEST witnesses will discuss how recovery of the reserve deficiency is being addressed in the interconnection charges.

Α

SUMMARY AND CONCLUSION

14 Q. COULD YOU PLEASE SUMMARIZE YOUR TESTIMONY?

Α.

The technological and competitive environment in the telecommunications industry today is changing at a pace unanticipated just a few years ago. Just as the Company must keep pace with these changes, so too must the depreciation lives used in cost studies. U S WEST has undertaken a detailed and quantitative approach to determining the depreciation lives for use in its cost studies. The reasonableness of the resulting lives is borne out by a comparison with

1 the lives used by other companies in the industry for the same types of 2 equipment. To ignore this evidence when determining the appropriate lives for depreciation studies is to deny U S WEST a realistic basis for its 3 4 costs. 5 6 In addition to using the proper depreciation lives to determine costs, it is 7 important that the existing reserve deficiency be addressed in 8 interconnection charges. In Wyoming the size of reserve deficiency is 9 approximately \$ 37.2 M (intrastate). Unless a provision is made to allow 10 for recovery of this deficiency in interconnection charges, in an 11 increasingly competitive environment, U S WEST will be denied an 12 opportunity to recover past depreciation expenses. U S WEST invested 13 in assets in Wyoming with the understanding that, under regulation, it 14 would be allowed an opportunity to recover its investment. It is only 15 appropriate that interconnection charges by set to provide this 16 opportunity. 17 18 Q. DOES THIS CONCLUDE YOUR TESTIMONY? 19 A Yes. 20

BEFORE THE PUBLIC SERVICE COMMISSION OF WYOMING

IN THE MATTER OF THE)
INTERCONNECTION CONTRACT)
NEGOTIATIONS BETWEEN) DOCKET NOs.
AT&T COMMUNICATIONS OF THE) 72000-TS-96-95 and
MOUNTAIN STATES, INC. AND U S WEST) 70000-TS-96-319
COMMUNICATIONS, INC. PURSUANT TO)
47 U.S.C. SECTION 252)

EXHIBITS OF

WILLIAM R. EASTON

DIRECTOR, CAPITAL RECOVERY

U S WEST COMMUNICATIONS